

WHAT IS CLAIMED IS:

1. A method for automatic layout of a photobook page comprising:
receiving a number of images for placement onto the photobook page,
the photobook page having a first dimension and a second dimension wherein the
5 first dimension is greater than the second dimension;
approximating a square root of the number of images;
determining a total number of page divisions along the first dimension of
the photobook page, wherein the total number of page divisions corresponds to the
approximated square root;
10 evaluating whether the photobook page is to be divided into a regular
array of image areas using a modulus of the number of images and the square
root;
determining a number of image areas to be included in a page division
using a ratio of the number of images to the approximated square root; and
15 distributing the images automatically on the photobook page among the
multiple image areas.
2. The method of claim 1, comprising:
establishing a grid on the photobook page as a regular array when a
modulus for the approximated square root and the number of images is zero.
- 20 3. The method of claim 1, comprising:
when a modulus for the approximated square root and the number of
images is greater than zero, establishing a grid on the photobook page as an
irregular array, and evaluating each page division for further division into a
multiple number of image areas.

4. The method of claim 3, comprising:
selecting a first number of page divisions to have a first number of image areas, where the first number corresponds to the modulus; and
selecting a second number of page divisions to have a second number of image areas, wherein the second number is different from the first number.
5. The method of claim 4, comprising:
randomly selecting a first set of the page divisions from among the total number of page divisions to have the first number of image areas.
6. The method of claim 5, comprising:
dividing the page into page divisions and multiple image areas.
7. The method of claim 6, comprising:
scaling each image to fit within one of the multiple image areas; and
positioning each image in a position within its image area.
8. The method of claim 7, comprising:
refining the position of each image within its image area.
9. The method of claim 8, comprising:
generating a random number for modifying a border width of each image.
10. The method of claim 9, wherein the random number is a border width modifier that is randomly selected for each image to be between -1 and +1.

11. The method of claim 9, comprising:
providing a border width for an image; and
calculating a position offset value for the image, wherein the position
offset value is calculated using the border width and the random number.

5 12. The method of claim 11, comprising:
determining a position coordinate value for the image using the position
offset value.

10 13. A computer readable medium having a program for producing a
photobook by executing the following procedure:
receiving a number of images for placement onto the photobook page,
the photobook page having a first dimension and a second dimension wherein the
first dimension is greater than the second dimension;
approximating a square root of the number of images;
15 determining a total number of page divisions along the first dimension of
the photobook page, wherein the total number of page divisions corresponds to the
approximated square root;
evaluating whether the photobook page is to be divided into a regular
array of image areas using a modulus of the number of images and the square
20 root;
determining a number of image areas to be included in a page division
using a ratio of the number of images to the approximated square root; and
distributing the images automatically on the photobook page among the
multiple image areas.

25 14. The computer readable medium of claim 13, the procedure
comprising:

establishing a grid on the photobook page as a regular array when a modulus for the approximated square root and the number of images is zero.

15. The computer readable medium of claim 13, the procedure comprising:

5 when a modulus for the approximated square root and the number of images is greater than zero, establishing a grid on the photobook page as an irregular array, and evaluating each page division for further division into a multiple number of image areas.

10 16. The computer readable medium of claim 15, the procedure comprising:

selecting a first number of page divisions to have a first number of image areas where the first number corresponds to the modulus; and

selecting a second number of page divisions to have a second number of image areas, wherein the second number is different from the first number.

15 17. The computer readable medium of claim 16, the procedure comprising:

randomly selecting a first set of the page divisions, from among the total number of page divisions, to have the first number of image areas.

20 18. The computer readable medium of claim 17, the procedure comprising:

dividing the page into page divisions and multiple image areas.

19. The computer readable medium of claim 18, the procedure comprising:

scaling each image to fit within one of the multiple image areas; and
positioning each image in a position within its image area.

20. The computer readable medium of claim 19, the procedure
comprising:

5 refining the position of each image within its image area.

21. The method of claim 20, comprising:
generating a random number for modifying a border width of each
image.

10 22. A system for automatic layout of a photobook page having a first
dimension and a second dimension, wherein the first dimension is greater than the
second dimension; comprising:

means for receiving a number of images for placement onto a photobook
page; and

15 means for processing the images to approximate a square root of the
number of images, to determine a total number of page divisions along the first
dimension of the photobook page wherein the total number of page divisions
corresponds to the approximated square root, to establish whether the photobook
page is to be divided into a regular array of image areas using a modulus of the
20 number of images and the square root; and to determine a number of image areas
to be included in a page division using a ratio of the number of images to the
approximated square root, wherein the processing means distributes the images
automatically on the photobook page among the multiple image areas.

23. The system of claim 22, wherein the processing means establishes a grid on the photobook page as a regular array when a modulus for the approximated square root and the number of images is zero.

5 24. The system of claim 22, wherein the processing means, when a modulus for the approximated square root and the number of images is greater than zero, establishes a grid on the photobook page as an irregular array and evaluates each page division for further division into a multiple number of image areas.

10 25. The system of claim 24, wherein the processing means selects a first number of page divisions to have a first number of image areas, where the first number corresponds to the modulus; and selects a second number of page divisions to have a second number of image areas, wherein the second number is different from the first number.

15 26. The system of claim 25, wherein the processing means randomly selects a first set of the page divisions, from among the total number of page divisions, to have the first number of image areas.